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June 3, 2005

TO: Mr. Russell Hart, RPM
United States Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

FROM: Mr. David Curnock, PM, SECOR International Incorporated

RE: MONTHLY PROGRESS REPORT/MEMORANDUM
Area 9/10 Remedial Design
Southeast Rockford Groundwater Contamination Superfund Site
Rockford, Illinois

Copies: Mr. Thomas Turner, Regional Counsel, USEPA Region V
Mr. Scott Moyer, Hamilton Sundstrand/United Technologies Corporation
Ms. Kathleen McFadden, United Technologies Corporation
Mr. Thomas Williams, PM, IEPA
Mr. Terry Ayers, IEPA

CURRENT MONTH PROJECT ISSUES/STATUS: (*activities, meetings, deliverables, etc.)*
Activities conducted in May 2005 consisted of the continuation of Pre-Design Investigation and conceptual design activities. Based on recent discussions between USEPA, IEPA, and SECOR, there are two areas of focus at this time with respect to the Remedial Design activities. These areas are the former RCRA Outside Container Storage Area (OSA) and the area beneath the Hamilton Sundstrand (HS) Plant #1, up-gradient of the additional monitoring wells installed in the western portion of the South Alley.

A work plan for source mass removal in the OSA was submitted to USEPA and IEPA in April. The work plan provided an analysis of the Pre-Design Investigation data collected to date, the rationale for the source removal effort, and a description of the planned activities. In May there was some correspondence and discussion between USEPA, IEPA, and SECOR regarding the planned activities and clarification of certain items presented in the plan.

The second area of focus is that area beneath the HS facility that has been identified as a location of potential source material based on down-gradient groundwater monitoring results. The most likely location of the potential source material is associated with the former area of underground storage tanks (USTs) which were in the central portion of the plant south of the loading dock area. With access to the inside of the building being unavailable, alternative means have been explored and horizontal drilling appears to be the most effective method of infrastructure installation.

A preliminary conceptual design for horizontal wells and pilot testing letter was submitted to the USEPA and IEPA in late May. This letter provides an overview of the currently envisioned potential horizontal well and pilot testing treatment corridor. The plan outlines

the optimal installation and treatment area without consideration of access constraints. Pilot testing of the horizontal wells will be a necessary part of the overall remedial design. The horizontal air sparge (AS) and soil vapor extraction (SVE) wells that are planned may become part of the final remedial design. This is consistent with a final remedial system design utilizing the Record of Decision (ROD) prescribed technologies for Area 9/10.

Off-site access for horizontal drilling will be required. Access to the DRB property to the south of the plant and beneath the Illinois Central Railroad line north of the plant will be necessary. The DRB property owners allowed access for the completion of soil borings and monitoring wells on their property as part of the Pre-Design Investigation activities in the past. The horizontal well installation and pilot testing activities will, however, be more intrusive than previous efforts.

A work plan for the AS and SVE horizontal well installation and pilot testing is presently being developed. This plan will provide specific well installation, well development, baseline sampling, and pilot test program details introduced in the preliminary conceptual design letter submitted in late May. Prior to submittal of the plan, HS will contact the DRB property owner and Illinois Central Railroad regarding access for the well installation activities and to confirm the viability of the optimal locations identified or alternate locations. The target submittal date for the work plan is August 15th, 2005.

The operation and hydrocarbon recovery of LNAPL (JP-4) from the recovery system in the south alley for the first quarter of 2005 has been reviewed. Overall, the system operation has been effective. There was no measurable hydrocarbon in any of the three recovery wells (RW-1, RW-2, and RW-3) at the time of the most recent water level measurements on May 3, 2005. On that date, the pumps were shutdown for several hours prior to removal of the pumps and gauging the groundwater levels. The well pumps were also inspected and cleaned at that time and reinstalled in the wells. The hydrocarbon recovery data from this system is being compiled into a summary table.

A round of groundwater levels were collected from Area 9/10 on May 3, 2005. A draft potentiometric surface map of this data is provided as Figure 1.

FUTURE PROJECT ISSUES/STATUS: *(activities, meetings, deliverables, etc.)*

Future project activities for June 2005 will include:

It is anticipated there will be continuing discussions with regard to the activities proposed in the OSA Work Plan and approval of the work plan will be obtained from USEPA/IEPA. Assuming that there are no significant changes to the scope of work, it is anticipated that this effort will be approved for implementation in Summer 2005. SECOR will commence formal preparations for completion of the work and begin the process of obtaining commitment schedules from contractors for work plan execution.

A letter was submitted to the USEPA and IEPA in May which outlined the conceptual horizontal SVE and AS well installation, well alignment, and pilot testing activities. Alternative contaminant source identification and access means will continue to be evaluated. Additional discussions, both internally and with the USEPA and IEPA, are anticipated with respect to horizontal drilling and additional pilot testing prior to preparation of a final design.

One topic of these discussions will be the required set back distances and off-site access for horizontal drilling. This issue has the potential to affect the overall design and constructability of a system. Currently, there is a presumption of reasonable access to the off-site property(s). However, the DRB property to the south is for sale which could affect current and future access. Utility clearance (even with horizontal drilling) could also be an issue. Therefore, local utility companies will be contacted to verify locations and approve of the techniques and potential subsurface crossings. There is also the potential when drilling on the property of others that previously unknown contamination may be encountered.

Compilation of the Pre-Design Investigation data into the Data Summary Report. This report will include boring logs, figures, groundwater flow information, and all laboratory analyses undertaken as part of the Pre-Design Investigation.

Monitoring and evaluation of LNAPL (JP-4) presence and recovery at the eastern end of the South Alley will continue. It is anticipated that the first quarter 2005 recovery information summary table will be reviewed and finalized in June and provided as part of the monthly memo in July.

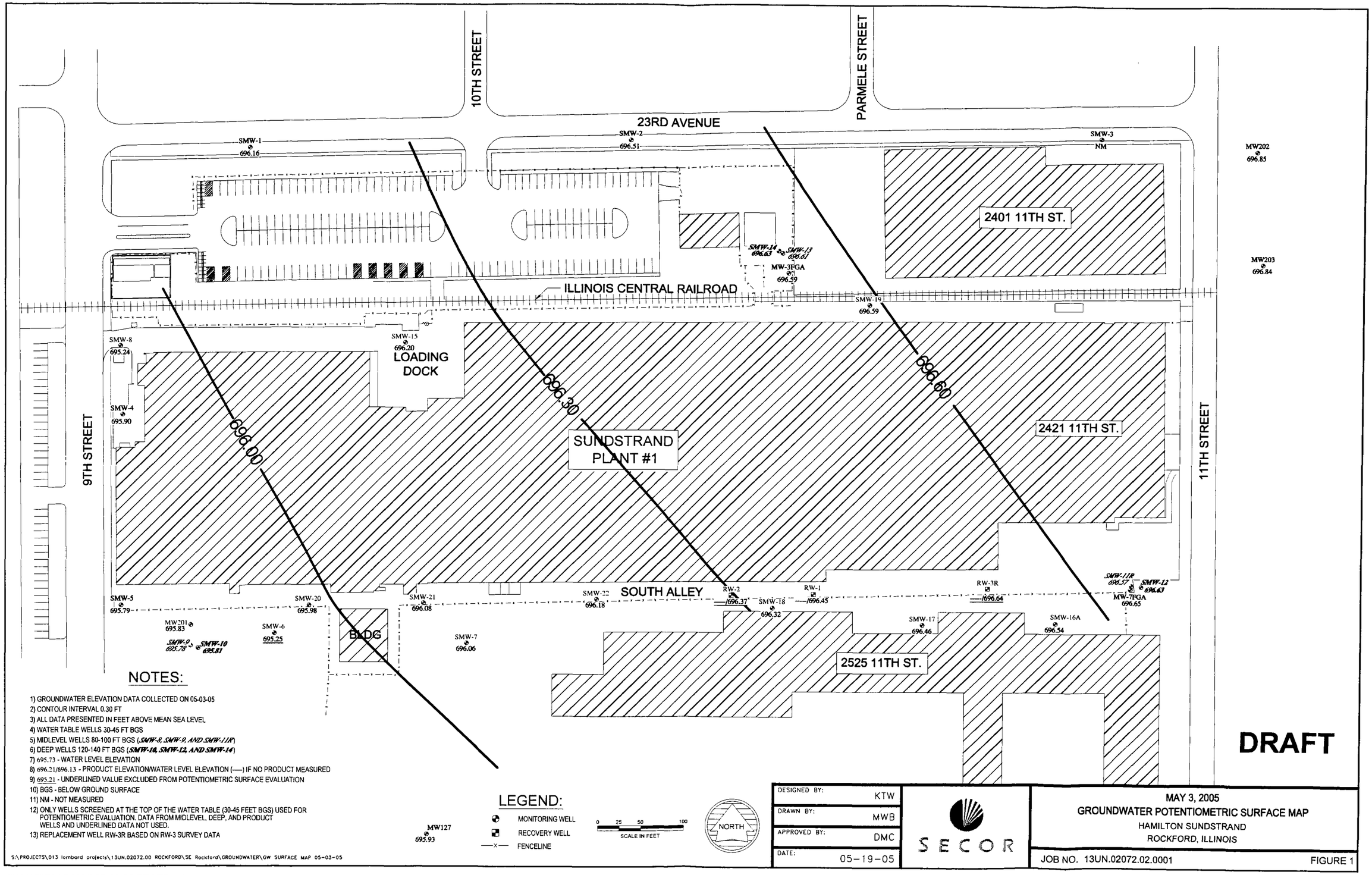
SAMPLE/TEST DATA SUBMITTALS:
The draft results of the May 3, 2005 potentiometric groundwater surface level information are included with this memorandum as Figure 1.

RD SCHEDULE UPDATE: (*attach updated schedule as necessary*)
As the activities associated with the Pre-Design Investigation portion of the Remedial Design (RD) continue, the overall schedule continues to be revised. A scope of work concerning the source mass reduction (by excavation) of near surface impacted soils in the OSA was submitted to the USEPA and IEPA in April and several aspects of the planned work were discussed in May. This source mass reduction activity is anticipated to take place in Summer 2005 based on agency approval of the plan without significant modification.

Access to potential source materials beneath the HS facility building will require the use of horizontal drilling. As mentioned previously, off-site access will be required for implementation of this technique. Access to off-site properties presents a potential to affect the schedule for implementation. HS is working on logistical issues associated with this drilling technology and will continue to work with the USEPA on keeping the RD efforts for Area 9/10 moving forward in a timely and reasonable fashion.

REALIZED/ANTICIPATED PROBLEM CONDITIONS:
None.

PERSONNEL CHANGES:
None.



NOTES:

1) GROUNDWATER ELEVATION DATA COLLECTED ON 05-03-05
2) CONTOUR INTERVAL 0.30 FT
3) ALL DATA PRESENTED IN FEET ABOVE MEAN SEA LEVEL
4) WATER TABLE WELLS 30-45 FT BGS
5) MIDLEVEL WELLS 80-100 FT BGS (*SMW-8, SMW-9, AND SMW-11R*)
6) DEEP WELLS 120-140 FT BGS (*SMW-16, SMW-12, AND SMW-14*)
7) 695.73 - WATER LEVEL ELEVATION
8) 696.21/696.13 - PRODUCT ELEVATION/WATER LEVEL ELEVATION (—) IF NO PRODUCT MEASURED
9) 695.21 - UNDERLINED VALUE EXCLUDED FROM POTENTIOMETRIC SURFACE EVALUATION
10) BGS - BELOW GROUND SURFACE
11) NM - NOT MEASURED
12) ONLY WELLS SCREENED AT THE TOP OF THE WATER TABLE (30-45 FEET BGS) USED FOR POTENTIOMETRIC EVALUATION. DATA FROM MIDLEVEL, DEEP, AND PRODUCT WELLS AND UNDERLINED DATA NOT USED.
13) REPLACEMENT WELL RW-3R BASED ON RW-3 SURVEY DATA

LEGEND:

- MONITORING WELL
- RECOVERY WELL
- —x— FENCELINE

0 25 50 100
SCALE IN FEET

NORTH

S:\PROJECTS\013 lombard projects\13UN.02072.00 ROCKFORD\SE Rockford\GROUNDWATER\GW SURFACE MAP 05-03-05

DRAFT

DESIGNED BY:	KTW
DRAWN BY:	MWB
APPROVED BY:	DMC
DATE:	05-19-05

SECOR

MAY 3, 2005
GROUNDWATER POTENTIOMETRIC SURFACE MAP
HAMILTON SUNDSTRAND
ROCKFORD, ILLINOIS

JOB NO. 13UN.02072.02.0001 FIGURE 1

GW SURFACE MAP 05-03-05 DRAFT.pdf